positive cocci – 71 isolates. The coagulase-negative *staphylococci* – 52 isolates (the Methicillin Resistant Coagulase-Negative *Staphylococci* MRCNS strains were detected). The *Enterococcus* spp. occurred in 9 isolates (the High Level Aminoglycoside Resistant HLAR *enterococci* strains were cultured). The *Enterobacteriaceae* family – 16 isolates and 15 isolates of Gram-negative nonfermenting rods were detected, some of Gram-negative rods were Extended-Spectrum Beta-Lactamases ESBL (+) strains.
Conclusions: 1. The domination of Gram-positive cocci in bacteriemia is caused by coagulase-negative *staphylococci* (a frequent cause of nosocomial catheter-related bloodstream infections) and may be due to the use of antimicrobial prophylaxis which reduces Gram-negative bacterial strains. 2. The increased rate of isolation of Multi-Drug-Resistant (MDR) bacteria to antimicrobial agents may be due to the frequent use of these agents for prophylaxis of bacterial infections in liver transplant recipients. These MDR bacterial strains caused severe blood infections in patients after LT.

18
Fungal Infections of Blood in Patients Undergoing Immunosuppressive Therapy after Solid Organ Transplantation: Epidemiology and Susceptibility of the Fungal Strains

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Background: Fungal infections caused by multidrug resistant strains are increasing clinical problems in immunocompromised patients.
Objectives: Estimation of frequency of fungal isolates from specimens obtained from immunocompromised patients hospitalized from February 2005 to February 2006, in the Transplantation Institute of the Medical University of Warsaw, and assessment of their susceptibility to antifungal agents.
Methods: Specimens sent for culture comprised of blood samples and vessels catheters. The isolation and identification of cultured fungi was done according to standard mycological procedures and commercially available test ID 32C and API *Candida* Tests (bioMerieux). Susceptibility of the strains to antifungal agents was made by E-test (AB Biodisk).
Results: Fungal cultures were positive in 27 patients. In total 61 strains of yeast-like fungi were isolated. Fifty strains were isolated from blood and 11 strains from catheters. The most commonly isolated species were: *C. parapsilosis* – 44, *C. albicans* – 9, *C. tropicalis* – 3, *C. guilliermondii* – 3, *C. glabrata* – 1 *C. krusei* – 1. All strains were susceptible to amphotericin B and caspofungin, Voriconazole – 98.4%, Itraconazole – 85.25%, Fluconazole – 82%. Non-albicans *Candida* strains were characterized by lower susceptibility to many commonly used antifungal agents.
Conclusions: The most common fungal pathogen isolated from clinical specimens was *C. parapsilosis* –72.1%. All fungal strains were susceptible to amphotericin B and caspofungin. The emergence of multi-drug resistant non-albicans *Candida* spp. warrants modification of antifungal therapy and prophylaxis, particularly in immunocompromised patients.

19
Withdrawn

20
Invasive Fungal Infections in Liver Recipients

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Background: Invasive fungal infections are common following orthotopic liver transplantation and are reported to occur in 6–47% of liver transplant recipients. Recent experience suggests that the overall incidence of this complication has declined due to improved surgical techniques, the availability of newer, more specific immunosuppressive agents with less dependence on glucocorticoids and the use of antifungal prophylaxis in certain circumstances. The dominant fungal pathogens in liver transplant recipients are *Candida* spp., accounting for over 80% of IFIs in this group. The aim of this study is to evaluate the fungal infections and the etiologic agents in the liver recipients.
Materials and Methods: A total of 91 liver transplantations were performed between the period 2001 and 2005 at Baskent University Faculty of Medicine. Medical records of these patients were evaluated retrospectively.

Results: Seventeen of ninety-one patients (18%) received antifungal therapy. Eight of these 17 patients received empirically and etiologic agents were recovered in nine patients. One *Aspergillus* spp., two *C. albicans* and six *Candida* spp. were recovered from four intra-abdominal specimens, three respiratory specimens, one from urine and one from blood. Nine of the patients received amphotericin B, five received fluconazole and three received caspofungin. Four of eight *Candida* spp. were found to be resistant to fluconazole (>64 mg/L).
Conclusion: Fungal infections are important complications of liver transplantation. *Candida* spp. are still the most commonly isolated fungal pathogens. The most striking finding is the high resistance rates against fluconazole, a commonly used drug for antifungal prophylaxis. Routine antifungal susceptibility testing of the fungal pathogens seems to be mandatory in this setting.

21
Urinary Tract Infections in Renal Infections in Renal Transplant Recipients

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Objectives: To determine the causative agents of urinary tract infections (UTIs) among renal transplant recipients and to compare the antibiotic susceptibilities of *Escherichia coli* strains isolated from complicated community acquired UTIs and renal transplant recipients.
Materials and Methods: We evaluated 75 episodes of 63 recipients (35 women and 28 men) with confirmed UTI who were transplanted during the period 1981–2006 at our center. Medical records of the patients were reviewed retrospectively. To compare the susceptibility rates of *E. coli*, 226 isolates from non-transplant patients with complicated community-acquired UTIs were also evaluated.
Results: The mean age of the patients was 36.5 years in the range from 16 to 58 years. While 52 of the 63 patients had single episodes, 11 of them had more than one. Of them, 6 episodes belonging to 3 patients were defined as reinfection. Ten episodes (13.3%) occurred in the first month following the transplantation, 11 (14.7%) in the period of the second month to sixth month and 54 (72%) occurred six months after transplantation. Forty-six (61.3%) of the 75 isolates were *Escherichia coli*, 9 (12%) *Klebsiella pneumoniae*, 4 (5.3%) *Klebsiella oxytoca*, 4 (5.3%) *Enterococcus spp.*, 3 (4%) methicillin-sensitive *Staphylococcus aureus*, 2 (2.7%) methicillin-resistant S. aureus, 2 (2.7%) *Acinetobacter baumanii*, 1 (1.3%) methicillin-sensitive coagulase-negative *staphylococcus*, 1 (1.3%) *Proteus mirabilis*, 1 (1.3%) *Pseudomonas aeruginosa*, 1 (1.3%) *Salmonella spp.*, 1 (1.3%) *Enterobacter aerogenes*. Among the *E. coli* isolates, ciprofloxacin resistance rates were 50% (2/4) in the first month after transplantation, 75% (6/8) in the period of the second month to sixth month, and 32.4% (11/34) 6 months after transplantation. The resistance rates of trimethoprim/sulfamethoxazole (TMP-SMX) in the same time periods were 100% (4/4), 87.5% (7/8), and 70.6% (24/34), respectively.
Conclusion: *E. coli* is the most frequently isolated organism from UTI in renal transplant recipients. The rates of resistance to TMP-SMX, ampicillin, gentamicin among *E. coli* isolated from renal recipients are significantly higher than those in community-acquired complicated UTIs. Prophylactic TMP-SMX use in renal transplant recipients provides some protection against UTI and other opportunistic infections. However, the increased resistance of urinary pathogens to this agent is a major concern. Although high resistance rates of ciprofloxacin against *E. coli* strains were determined in this group, it was not found to be statistically significant.

22
Cytomegalovirus Infections in Solid Organ Transplant Recipients

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Introduction: *Cytomegalovirus* (CMV) has been recognized as one of the most important opportunistic pathogens in transplant recipients. The aim of this study is to describe the patient characteristics, clinical presentations, the diagnostic tools, therapeutical regimens and outcomes of the CMV infections in solid organ recipients.
Methods: Patient data were evaluated retrospectively. Nineteen CMV infection episodes in 19 solid organ recipients those were followed up with the diagnosis of CMV infection during the period 1997–2005 in our transplantation center were included.
Results: Fourteen of the patients were male and 5 were female. One of the 14 male patients and 2 of the 5 female patients were liver recipients and